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08/765,046 11/15/96 TABATA

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EXAMINER

VANDY, T

ART UNIT

PAPER NUMBER

1754

DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08-765,046

Applicant(s)

TABATA ET AL.

Examiner

VANOY

Group Art Unit

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—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) MAILED filed on JULY 02, 2001
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 2-5, 7, 8, 10, 12 AND 15-26 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 7, 8 AND 22 is/are allowed.
- ☒ Claim(s) 2-5, 10, 12, 15-21 AND 23-26 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

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DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 C.F.R. 3.73(b).

✓ Claims 10, 12 and 16-21 are again rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 5,869,013. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 08-765,046 and U. S. Pat. No. 5,869,013 disclose obvious variations of the same method for removing nitrogen oxides out of exhaust gases by contacting the nitrogen oxide contaminated exhaust gas and hydrocarbon reducing agents with a beta aluminosilicate impregnated with cobalt having overlapping silica to alumina ratios (compare the silica to alumina ratio of 5 to 250 reported in claim 1 in U. S. Pat. 5,869,013 to the silica to alumina ratio of 20 to 800 set forth in claim 18 in 08-765,046) and overlapping cobalt to aluminum ratios (compare the cobalt to aluminum ratio of lower than 0.5 reported in claim 1 in U.

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S. Pat. No. 5,869,013 to the cobalt to aluminum ratio of 0.2 to 0.6 reported in claim 18 in 08-765,046).

The difference between the claims of 08-765,046 and U. S. Pat. No. 5,869,013 is that claim 1 in U. S. Pat. No. 5,869,013 discloses the pressure and gas hourly space velocity of the gas being treated, however it is submitted that this difference would have been obvious to one of ordinary skill in the art at the time the invention was made because it is expected to be well within the skill level of the person having ordinary skill in this art to determine what the optimum process parameters are (namely, the gas pressure, gas hourly space velocity, etc. . . reported in claim 1 in U. S. Pat. No. 5,869,013) within the general conditions of the prior art, consistent with the decisions reached in *In re Aller et al.* 105 U.S.P.Q. 233; *In re Reni* 164 U.S.P.Q. 245 and *In re Boesch* 205 U.S.P.Q. 215 and 219.

✓ Claims 2-5, 10, 12 and 15-21 are again rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U. S. Patent No. 5,985,225. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of 08-765,046 and U. S. Pat. 5,985,225 disclose obvious variations of the same catalyst and the same method of using the catalyst to remove nitrogen oxides out of exhaust gas.

The difference between the Applicants' claims and U. S. Pat. No. 5,985,225 is that the claims of U. S. Pat. 5,985,225 disclose that the catalyst composition exhibits a Raman spectrum

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of the cobalt loaded zeolite that has a ratio of intensity of the 689 cm^{-1} band to the zeolite framework bands of between 300 and 600 cm^{-1} that is less than 0.07 .

Claim 5 in U. S. Pat. 5,985,225 sets forth that the zeolite is a BEA (i. e. beta) zeolite.

Claim 4 in 08-765,046 sets forth that the aluminosilicate is of the BEA structure.

Therefore, this difference (i. e. the recitation that the catalyst composition exhibits a Raman spectrum of the cobalt loaded zeolite that has a ratio of intensity of the 689 cm^{-1} band to the zeolite framework bands of between 300 and 600 cm^{-1} that is less than 0.07) would have been obvious to one of ordinary skill in the art at the time the invention was made because a comparison of claim 4 in 08-765,046 and claim 5 in U. S. Pat. 5,985,225 makes it obvious that the same catalyst is being claimed. The same catalyst would inherently exhibit the same Raman spectrum characteristics.

Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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✓ a) Claims 23 and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations introduced by the Amendment mailed on 02 July 2001 into claims 23 and 24 setting forth that the crystalline metallosilicate has a structure other than a MEL structure is not supported by previous claims 25 and 26 and the paragraph bridging pages 5 and 6 in the Applicants' specification as originally filed and, therefore, these limitations are new matter.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicants are advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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The person having "ordinary skill in the art" has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

✓ Claims 23-26 are again rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over European Pat. App'n. No. 0 499 087 A1 to Kawai et al.

EP 0 499 087 discloses a process for catalytically promoting the removal of nitrogen oxides out of an exhaust gas comprising hydrocarbons; excess oxygen and water (please see Table 1 on pg. 5) emitted from an internal combustion engine (please see pg. 2 lines 5-7 and pg. 3 lines 1-3) by contacting the exhaust gas with a zeolite (which may be ZSM-11, i. e. the MEL zeolite of Applicants' claims 25 and 26), wherein the zeolite is characterized by the cobalt contained therein (please see pg. 3 lines 29-32 and lines 55-56).

The difference between the Applicants' claims and EP 0 499 087 is that Applicants' claims 25 and 26 specifically calls for the use of MEL zeolite, whereas pg. 2 lines 29-32 in EP 0 499 087 discloses the use of a plurality of zeolites to include MEL zeolite (i. e. the ZSM-11), however it is submitted that this difference would have been obvious to one of ordinary skill in the art at the time the invention was made because it is obvious to select a particular species from a group of species disclosed in a reference for the same purpose disclosed in the reference.

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Claims 2-5, 7, 8, 10, 12 and 15-22 have not been rejected under either 35 U.S.C. 102 or 35 U.S.C. 103 because there is no suggestion or teaching in the references of record to modify the zeolite catalysts of either Japan patent document no. 5-220,403 A; U. K. patent application no. 2 238 784 A or E. P. 0499 087 A1 to include either or both of the boron and titanium set forth in Applicants' claims 2-5, 7, 8, 10, 12 and 15-22.

Response to Arguments

Applicants' arguments submitted in their Amendment mailed 02 July 2001, which has been filed as Paper No. 35, have been fully considered but they are not persuasive.

a) *The Applicants argue that the obviousness-type double patenting rejections of the claims are rendered moot by the submission of the terminal disclaimers.*

The obviousness-type double patenting rejections are maintained because there are no terminal disclaimers of record submitted with the Applicants' Amendment mailed 02 July 2001.

b) *The Applicants argue that claims 23-26 are not anticipated by or obvious from EP 499,087 (Kawai) because these claims have been amended to exclude a MEL-type structure.*

The rejection is maintained because the argued limitation of the structure excluding a MEL-type structure is new matter.


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Applicants' amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). The Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Timothy C. Vanoy at telephone number (703) 308- 2540.

Timothy Vanoy/tv


Timothy Vanoy

24 January 2001

Patent Examiner

16 July 2001

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